

02/08/05
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USSN: 09/528,682
Atty. Dkt. No.: PP00342.105
2302-0342.10

AMENDMENTS TO THE SPECIFICATION

M/B

Please amend the paragraph beginning on line 25 of page 5 as follows:

It will be appreciated that in derivatives of LT-A, such as fragments, or in LT-A proteins of different *E. coli* strains, the amino acid residue to be mutated is that which corresponds to Ala-72 as defined for LT-A in Domenighini et al. [Molec. Microbiol. (1995) 15:1165-1167]. Ala-72 is located on the second turn of the alpha-helix in LT-A and faces the NAD binding site. An alignment of amino acid sequence entries for enterotoxin A subunits is shown in Figure 1 of Domenighini and reproduced as FIG. 12 herein. The correct sequences of LT_p, LT_h, LT-IIa and LT-IIb as given in Domenighini are as follows:

LT_p:

NGDRLYRADSRPPDEIKRSGGLMPRGHNEYFDRQTQMNINLYDHARGTGTGFVRY
DDGYVSTSLRSAHLAGQSIISGYSTYYIYVIATAPNMNVNDVLGVYSPHPYEQE
V SALGGIPYSQIYGWYRVNFGVIDERLHRNREYRDRYYRNLNIAPAEDGYRLAGFP
PDHQA WREEPWIHHAPQGCGNSSRTITGDTCNEETQNLSTIYLREYQSKVKRQIFSD
YQSEVDIYNRIRDEL (SEQ ID NO:1)

LTh:

NGDKLYRADSRPPDEIKRSGGLMPRGHNEYFDRQTQMNINLYDHARGTGTGFVRY
DDGYVSTSLRSAHLAGQSIISGYSTYYIYVIATAPNMNVNDVLGVYSPHPYEQE
V SALGGIPYSQIYGWYRVNFGVIDERLHRNREYRDRYYRNLNIAPAEDGYRLAGFP
PDHQA WREEPWIHHAPQGCGNSSRTITGDTCNEETQNLSTIYLREYQSKVKRQIFSD
YQSEVDIYNRIRNEL (SEQ ID NO:2)

LT-IIa:

NDFFRADSRTPDEIRRAGGLPRGQQEAYERQTPININLYEHARGTVTGNTRYNDG
YVSTTVTLRQAHЛИQNILGSYNEYIYVVAPAPNLFDVNGVLGRYSPYPSNEFAA
LGGIPLSQIIGWYRVSGAIEGGMQRNRDYZRGDLFRGLTVAPNEDGYQLAGFPSNFP

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A WREMPWSTFAPEQCVNNKEFKGGVCISATNVLSKYDLMNFKKLLKRRRLALTFF
MSEDDFIGVHGERDEL (SEQ ID NO:3)

LT-IIb:

NDYFRADS RTPDEV RRS GGLIPRGQDEAYER QTPININLYDHARGTATGNTRYNDG
YVSTTTLRQAHFLGQNMLGGYNEYIYVVAAPNLFDVNGVLGRYSPYPSENEF
AALGGIPLSQIIGWYRVSFGAIEGGMHRNRD YRRDLFRGLSAAPNEDGYRIAGFPDG
FPAWE EVPWREFAPNSCLPNNKASSDTTCASLTNKL SQHDLADFKKYIKRKFTLMR
INNDGFFSNNGGKDEL (SEQ ID NO:4)

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AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 41, line 35 with the following amended paragraph:

The 1.5 kb SmaI-EcoRI fragment from plasmid pEWD299, containing the LT-A gene encoding a polypeptide having the sequence of SEQ ID NO:5 and the LTpromoter region [Pronk et al. (1985) J. Biol. Chem. 260:13580; Spicer et al. (1981) Proc. Natl. Acad. Sci. USA 78:50] was subcloned into the Bluescript KS vector (Stratagene). The resultant vector, termed BS-LT-A, was used for site-directed mutagenesis [Zoller & Smith (1982) Nucl. Acid. Res. 10:6487)].